Claims

1.   (Currently Amended) A motion controlled handheld device comprising:

a display having a viewable surface and operable to generate an image;

a gesture database maintaining a plurality of gestures, each gesture defined by a motion of the device with respect to a first position of the device, the gestures comprising symbol gestures each corresponding to a character from a preexisting character set;

an application database maintaining at least one application;

a gesture mapping database comprising a gesture input map for the application, the gesture input map comprising mappings of the symbol gestures to corresponding inputs for the application;

a motion detection module operable to detect motion of the handheld device within three dimensions and to identify components of the motion in relation to the viewable surface; and

a control module operable to load the application, to track movement of the handheld device using the motion detection module, to compare the tracked movement against the symbol gestures to identify a matching symbol gesture, to identify, using the gesture input map, the corresponding input mapped to the matching symbol gesture, and to provide the corresponding input to the application;

wherein a set of the inputs map to commands of the application; and

wherein the symbol gestures are logically associated with names of the commands.

2.   (Original) The motion controlled handheld device of Claim 1, wherein the preexisting character set comprises a written character set.

3.   (Original) The motion controlled handheld device of Claim 2, wherein the written character set comprises alphanumeric characters.

4.   (Original) The motion controlled handheld device of Claim 2, wherein the written character set comprises pictographic characters.

5.   (Canceled)

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6.   (Canceled)

7.   (Original) The motion controlled handheld device of Claim 1, wherein each symbol gesture is defined by a single continuous sequence of accelerations defined with respect to the first position.

8.   (Original)   The motion controlled handheld device of Claim 1, further comprising:

a first accelerometer operable to detect acceleration along a first axis;

a second accelerometer operable to detect acceleration along a second axis, the second axis perpendicular to the first axis; and

a third accelerometer operable to detect acceleration along a third axis, the third axis perpendicular to the first axis and perpendicular to the second axis; and wherein:

the gesture database further defines each of the gestures using a sequence of accelerations;

the motion detection module is further operable to detect motion of the device using accelerations measured by the first accelerometer, the second accelerometer, and the third accelerometer; and

the control module is further operable to match the accelerations measured by the motion detection module against gesture definitions in the gesture database to identify particular ones of the gestures.

9.   (Currently Amended)   A method for controlling a handheld device comprising:

generating an image on a viewable surface of the handheld device;

maintaining a gesture database comprising a plurality of gestures, each gesture defined by a motion of the device with respect to a first position of the device, the gestures comprising symbol gestures each corresponding to a character from a preexisting character set;

maintaining an application database comprising at least one application;

maintaining a gesture mapping database comprising a gesture input map for the application, the gesture input map comprising mappings of the symbol gestures to corresponding inputs for the application;

loading the application;

tracking movement of the handheld device in relation to the viewable surface;

comparing the tracked movement against the symbol gestures to identify a matching symbol gesture;

identifying, using the gesture input map, the corresponding input mapped to the matching symbol gesture; and

providing the corresponding input to the application;

wherein a set of the inputs map to commands of the application; and

wherein the symbol gestures are logically associated with names of the commands.

10.   (Original)   The method of Claim 9, wherein the preexisting character set comprises a written character set.

11.   (Original)   The method of Claim 10, wherein the written character set comprises elements selected from a set of alphanumeric characters and a set of pictographic characters.

12.   (Canceled)

13.   (Original)   The method of Claim 9, wherein each symbol gesture is defined by a single continuous sequence of accelerations defined with respect to the first position.

14.   (Original)   The method of Claim 9, wherein the gesture database further defines each of the gestures using a sequence of accelerations; the method further comprising:

detecting acceleration along a first axis;

detecting acceleration along a second axis, the second axis perpendicular to the first axis; and

detecting acceleration along a third axis, the third axis perpendicular to the first axis and perpendicular to the second axis;

detecting motion of the device using accelerations measured by the first accelerometer, the second accelerometer, and the third accelerometer; and

matching the accelerations against gesture definitions in the gesture database to identify potential indicated ones of the gestures.

15.   (Currently Amended)   Logic for controlling a handheld device, the logic embodied as a computer program stored on ~~in~~ a computer readable medium and operable when executed to perform the steps of:

generating an image on a viewable surface of the handheld device;

maintaining a gesture database comprising a plurality of gestures, each gesture defined by a motion of the device with respect to a first position of the device, the gestures comprising symbol gestures each corresponding to a character from a preexisting character set;

maintaining an application database comprising at least one application;

maintaining a gesture mapping database comprising a gesture input map for the application, the gesture input map comprising mappings of the symbol gestures to corresponding inputs for the application;

loading the application;

tracking movement of the handheld device in relation to the viewable surface;

comparing the tracked movement against the symbol gestures to identify a matching symbol gesture;

identifying, using the gesture input map, the corresponding input mapped to the matching symbol gesture; ~~and~~

providing the corresponding input to the application;

wherein a set of the inputs map to commands of the application; and

wherein the symbol gestures are logically associated with names of the commands.

16.   (Original)   The logic of Claim 15, wherein the preexisting character set comprises a written character set.

17.   (Original) The logic of Claim 16, wherein the written character set comprises alphanumeric characters.

18.   (Original) The logic of Claim 16, wherein the written character set comprises pictographic characters.

19.   (Original) The logic of Claim 15, wherein each symbol gesture is defined by a single continuous sequence of accelerations defined with respect to the first position.

20.   (Original) The logic of Claim 15, wherein the gesture database further defines each of the gestures using a sequence of accelerations; the logic further operable when executed to perform the steps of:

detecting acceleration along a first axis;

detecting acceleration along a second axis, the second axis perpendicular to the first axis; and

detecting acceleration along a third axis, the third axis perpendicular to the first axis and perpendicular to the second axis;

detecting motion of the device using accelerations measured by the first accelerometer, the second accelerometer, and the third accelerometer; and

matching the accelerations against gesture definitions in the gesture database to identify potential indicated ones of the gestures.

21.   (Currently Amended) A motion controlled handheld device comprising:

means for generating an image on a viewable surface of the handheld device;

means for maintaining a gesture database comprising a plurality of gestures, each gesture defined by a motion of the device with respect to a first position of the device, the gestures comprising symbol gestures each corresponding to a character from a preexisting character set;

means for maintaining an application database comprising at least one application;

means for maintaining a gesture mapping database comprising a gesture input map for the application, the gesture input map comprising mappings of the symbol gestures to corresponding inputs for the application;

means for loading the application;

means for tracking movement of the handheld device in relation to the viewable surface;

means for comparing the tracked movement against the symbol gestures to identify a matching symbol gesture;

means for identifying, using the gesture input map, the corresponding input mapped to the matching symbol gesture; ~~and~~

means for providing the corresponding input to the application;

wherein a set of the inputs map to commands of the application; and

wherein the symbol gestures are logically associated with names of the commands.